

SPEECH PROCESSING APPARATUS AND MOBILE COMMUNICATION
TERMINAL

ABSTRACT OF THE DISCLOSURE

A speech processing apparatus able to enhance formants more naturally, wherein a speech analyzing unit analyzes an input speech signal to find LPCs and converts the LPCs to LSPs, a speech decoding unit calculates a distance between adjacent orders of the LSPs by an LSP analytical processing unit and calculates LSP adjusting amounts of larger values for LSPs of adjacent orders closer in distance by an LSP adjusting amount calculating unit, an LSP adjusting unit adjusts the LSPs based on the LSP adjusting amounts such that the LSPs of adjacent orders closer in distance become closer, an LSP-LPC converting unit converts the adjusted LSPs to LPCs, and an LPC combining unit uses the LPCs and sound source parameters to obtain formant-enhanced speech.